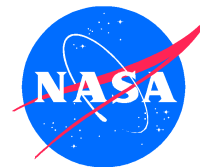


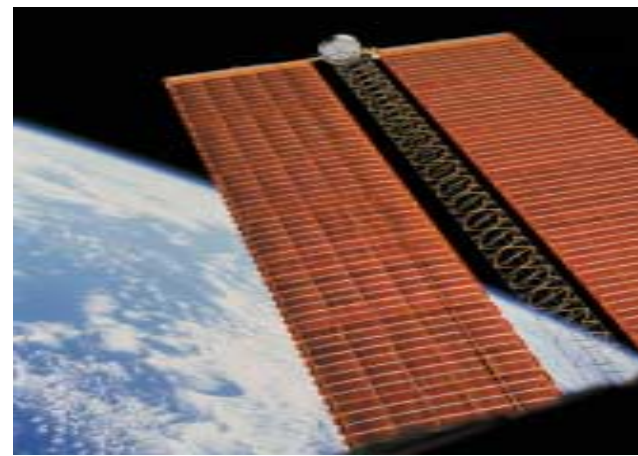
Atomic Oxygen Protective Coatings for Solar Array Blankets



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TECHNOLOGY

Atomic oxygen in low Earth orbit readily oxidizes all hydrocarbon polymers which compromises the structural integrity of most thin polymers used on spacecraft. Atomic oxygen protective coatings provide adequate protection and prevent the structural failure of the solar array blankets on the International Space Station. These coatings, produced by Sheldahl, were recommended and evaluated by NASA GRC for use on the International Space Station.



COMMERCIAL APPLICATION

- ◆ Atomic oxygen protective coatings provide adequate protection to low Earth orbital spacecraft.

Atomic Oxygen Protective Coatings prevent the structural failure of the solar array blankets on the International Space Station.

SOCIAL / ECONOMIC BENEFIT

- ◆ This technology has saved the expense of replacing solar array blankets and has assured the success of the International Space Station.

NASA APPLICATIONS

- ◆ Atomic Oxygen Protective Coatings were used on the U.S.A supplied Mir solar array and the International Space Station solar array which is successfully operating with protection from exposure to low Earth orbital atomic oxygen.